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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/382,834 BEAMAN В Y0993-0288X MMC1/0731 **EXAMINER** DANIEL E MORRIS MGUYEN. V INTELLECTUAL PROPERTY LAW DEPT IBM COPORATION **ART UNIT** PAPER NUMBER P 0 B0X 218 2853 YORKTOWN HEIGHTS NY 10598 DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

07/31/01

|   | Applicati n N .         | Applicant(s)   |
|---|-------------------------|--|
| · Office Action Summary   | 09/382,834              | BEAMAN ET AL.  |
|   | Examiner                | Art Unit   |
|   | VINH P NGUYEN           | 2858   |
| Th MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |                         |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |                         |  |
| 1) Responsive to communication(s) filed on <u>07 A</u>  | <u>//ay 2001</u> .      |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)□ Thi   | is action is non-final. |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |                         |  |
| Disposition of Claims   |                         |  |
| 4)⊠ Claim(s) <u>29-52</u> is/are pending in the application.  |                         |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |                         |  |
| 5) Claim(s) is/are allowed.   |                         |  |
| 6)⊠ Claim(s) <u>29-52</u> is/are rejected.  |                         |  |
| 7) Claim(s) is/are objected to.   |                         |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |                         |  |
| Application Papers  |                         |  |
| 9)☐ The specification is objected to by the Examiner.   |                         |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |                         |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                         |  |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.   |                         |  |
| If approved, corrected drawings are required in reply to this Office action.  |                         |  |
| 12) The oath or declaration is objected to by the Examiner.   |                         |  |
| Priority under 35 U.S.C. §§ 119 and 120   |                         |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |                         |  |
| a) All b) Some * c) None of:  |                         |  |
| 1. Certified copies of the priority documents have been received.   |                         |  |
| 2. Certified copies of the priority documents have been received in Application No  |                         |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.  |                         |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |                         |  |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.   |                         |  |
| Attachment(s)   |                         |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s).  | 5) Notice of Informal I | y (PTO-413) Paper No(s) Patent Application (PTO-152) |
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1. Claims 29,35 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It appears that the original specification does not have support for the limitations of "the flexible contact elements deflect away from the original shape when said flexible contacts contact the leectronic components; the flexible contact elements substantially return to the original shape when the flexible contact elements are withdrawn from contacting the electronic component" as recited in claim 29.

2. Claims 42-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 42, it is unclear what "socket" represents. Is it shown in any of drawings? 45, it is unclear how a probe card "is interrelated and associated with the first substrate". In claim 49, it is unclear what "means, within each of the first substrate" and "plurality of first substrates" represent. Are they shown in any of drawings? In claim 51, "said second substrates" has not been recited previously, therefore this term is indefinite. In claim 52, it is unclear what "a plurality of said second substrates" represent. Are they shown in any of drawings? "said second substrates" has not been recited previously, therefore this term is indefinite.

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The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 30-51 (insofar as understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Bove et al (Pat # 4,038,599).

As to claims 30-34,35,38,39-41,43-51, Bove et al disclose a high density wafer contacting and test system having a second substrate (20) with a plurality of flexible contact elements (19) for making contact with the dies or integrated circuits formed on the wafer ("16" as Packaging substrate), a first substrate or transformer (13) with a first plurality of conductive lands (13a) for electrically connecting to the second substrate (20) and an electrical testing apparatus (14,15) electrically connected to the first and second substrate through a plurality of electrical connections (11,13). It appears that the probe elements (19) are flexible. As to claim 36, it appears that the end of each probe (19) has a protuberance. As to claim 37, it appears that the probes (19) are shaped wires disposed on the surface of the second substrate. As to claim 42, it appears that the second substrate is aligned to the first substrate by a socket (17a). As to claims

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45 and 47-48, it appears that the probes (19) are free standing flexible conductors.

- 5. Applicant's arguments with respect to claims 29-52 filed on 05/30/2001 have been considered but are moot in view of the new ground(s) of rejection.
- Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

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